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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,010	06/28/2005	Gunter Saliger	01873.200016.	9017
5514 7590 05/06/2010 FITZPATRICK CELLA HARPER & SCINTO 1290 Avenue of the Americas NEW YORK, NY 10104-3800				
EXAMINER				
SINGH, SUNIL K				
ART UNIT		PAPER NUMBER		
3732				
MAIL DATE		DELIVERY MODE		
05/06/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/541,010

**Applicant(s)**

SALIGER ET AL.

**Examiner**

Sunil K. Singh

**Art Unit**

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)  
Paper No(s)/Mail Date 02/11/2010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This action is in response to Applicant's amendments filed on 02/11/2010.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1- 9 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willoughby (US 6,126,445) in view of Perot et al. (US 6,398,554).

Willoughby discloses a method that includes: recording a real clinical situation or a shaped clinical situation of the implant as a digital data (column 50, lines 35-45); analyzing the recorded situation and determining an implant axis (column 50, lines 45-53); computing an optimum shape of the dental superstructure based at least in part on the determined implant axis (column 50, lines 58-65); fabricating the first and second elements from one or more blanks (66) on the basis of digital data with aid of equipment matching (column 50, line 58-column 51, line 45); transmitting the digital data to machining equipment for fabrication of the elements (column 50, line 58-column 51, line 45); determining a mating surface between the first digital data and the second digital data; wherein the shape of the element is described by at least two parameters: tilt angle and the angle of rotation (column 50, lines 52-53); wherein the shape of the dental superstructure are described in the coordinate system of the geometry; wherein

the method includes interactively determining the axis of the implant by a user (column 50, lines 60-65); wherein the first element of is an abutment (22) and the second element is a crown (26) (column 52, lines 1-10); wherein the superstructure comprises a number of abutments which are interconnected by a common frame construction (i.e. bridge) (column 52, line 2)(also see figures 34-39a); wherein the distribution rules can be varied by a user; and wherein the element can be a cap (column 55, lines 54-56). However, Willoughby fails to teach automatically separating the superstructure into a first element and a second element.

Perot teaches a method that includes recording a separate 1<sup>st</sup> element (R3) and a 2nd element (R4) and the method of generating digital data representing the optimum shape of the dental superstructure (column 4, lines 59-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Willoughby to separate the superstructure into a first element (cap) and a second element (crown) in order to modify each element resulting in a more precise fit between the two elements and between the elements and the patient's oral cavity. Furthermore, it would have been obvious to modify this method to make it done automatically, since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. See *In re Venner*, 120 USPQ 192.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willoughby in view of Perot et al. and further in view of Rathke (USPN 6,968,247).

Willoughby/Perot teaches a method as above, but fails to adequately disclose a third element, being a veneer, to be fabricated by said method.

Rathke teaches a veneer to be fabricated by a digitized method as above. It would have been obvious to one of ordinary skill in the art to modify Willoughby/Perot's method in view of Rathke's in order to make a more aesthetically pleasing abutment system.

#### ***Response to Arguments***

4. Applicant's arguments filed 02/11/2010 have been fully considered but they are not persuasive. The Applicant argues that Perot does not disclose separating the digital data into a first and second elements and then fabricating the two elements based on the digital data. However, the Examiner disagrees. Perot discloses in column 5, line 35- column 6, line 30, that there are two separate digital data representing the crown and a cap. Perot further discloses fabricating the cap based on the digital data representation and also to further fabricate the crown based on the data (Column 5, Lines 35-45). Therefore, it is the Examiner's position that Perot discloses the limitation as claimed.

#### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday (Increased Flex Schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/04/2010

/Sunil K Singh/  
Examiner, Art Unit 3732

/Cris L. Rodriguez/  
Supervisory Patent Examiner, Art Unit 3732